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EPIDEMIOLOGY OF DEMENTIA IN SÃO PAULO, BRAZIL: RISK FACTORS AND AGE OF ONSET OF DEMENTIA DUE TO ALZHEIMER'S DISEASE

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Objectives: To investigate the impact of previously reported sporadic risk factors over the age of onset of Alzheimer's disease (AD) in a Brazilian sample.

Methods: A total of 129 patients with late-onset AD were surveyed at the Behavioural Neurology Section of the Federal University of São Paulo – UNIFESP. Variables included gender, schooling, cerebrovascular risk factors (hypertension, diabetes *mellitus*, hypercholesterolemia, obesity, smoking, and drinking alcoholic beverages in excess of 10 l per year), history of brain trauma with loss of consciousness, systemic infections, and family history (up to second degree relatives) of AD, other brain diseases or cardiovascular diseases. The impact of these factors was investigated over age of onset of AD, and also over depressive symptoms and behavioural disturbances. *Chi-square* was employed for statistical analysis, with significance at $p < 0.05$.

Results: Mean age of AD onset was 72.4 ± 6.2 years (range 60-88), and mean schooling was 4.4 ± 3.7 years (range 0-15). Overall, 32 patients had history of brain trauma, 16 of them with loss of consciousness, 56 patients (43.4%) had depression and 47 (36.4%) had behavioural disturbances, all of them under treatment. A total of 36 (27.9%) patients had history of treated systemic infections, 47 (36.4%) had family history of AD, 29 (22.5%) had family history of other brain diseases, and 41 (31.8%) had family history of cardiovascular diseases. Female gender ($p = 0.047$) and history of systemic infections ($p = 0.033$) were associated to a greater chance of development of depressive symptoms, but no factor was associated to a greater prevalence of behavioural disturbances. Family history of brain diseases was strongly linked to an earlier age of onset of AD, both when the cut-off of 70 years-old was adopted ($p = 0.017$) and when the cut-off was 80 years-old ($p = 0.033$); however, when family history of AD or cardiovascular diseases was also considered, no significant relation was found. There was no relationship between age of onset of AD and brain trauma ($p > 0.82$), cerebrovascular risk ($p > 0.47$) or schooling ($p > 0.27$).

Conclusion: Environmental, educational and demographic factors do not seem to be significantly related to the age of onset of AD in Brazil.

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